

Youjun Lu

List of Publications by Year in descending order

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Version: 2024-02-01

80
papers

3,357
citations

136950

32
h-index

144013

57
g-index

80
all docs

80
docs citations

80
times ranked

2100
citing authors

#	ARTICLE	IF	CITATIONS
1	Particle convective heat transfer near the wall in a supercritical water fluidized bed by single particle model coupled with CFD-DEM. <i>Particuology</i> , 2023, 73, 47-58.	3.6	3
2	Fluidization of particles in SCW fluidized bed: Voidage distribution of emulsion phase. <i>Particuology</i> , 2022, 63, 60-75.	3.6	5
3	Numerical simulation of local and global mixing/segregation characteristics in a gas-solid fluidized bed. <i>Chinese Journal of Chemical Engineering</i> , 2022, 44, 72-86.	3.5	3
4	A comparative investigation of flow structures in three-dimensional supercritical water and gas-solid fluidized bed via two-fluid model simulations. <i>Journal of Supercritical Fluids</i> , 2022, 181, 105515.	3.2	5
5	Numerical study of hydrogen hydrothermal combustion characteristics in a coaxial nozzle burner. <i>Journal of Supercritical Fluids</i> , 2022, 183, 105537.	3.2	5
6	Oxidation Kinetics of Methane and Methane/Methanol Mixtures in Supercritical Water. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 3889-3899.	3.7	2
7	Kinetic Model for High-Pressure Methanol Oxidation in Gas Phase and Supercritical Water. <i>Energy & Fuels</i> , 2022, 36, 575-588.	5.1	8
8	Detailed chemical kinetics simulation of hydrogen hydrothermal combustion characteristics: Special effects of supercritical H ₂ O/CO ₂ mixtures. <i>Journal of Supercritical Fluids</i> , 2022, 188, 105677.	3.2	2
9	Wall-to-bed heat transfer in supercritical water fluidized bed using CFD-DEM. <i>Particuology</i> , 2021, 56, 113-123.	3.6	6
10	A method to deal with constant wall flux boundary condition in a fluidized bed by CFD-DEM. <i>Chemical Engineering Journal</i> , 2021, 406, 126880.	12.7	2
11	Kinetic modeling of carbon monoxide oxidation and water gas shift reaction in supercritical water. <i>Journal of Supercritical Fluids</i> , 2021, 171, 105165.	3.2	6
12	Drag coefficient and volume fraction of bubbles in a supercritical water fluidized bed. <i>Particuology</i> , 2021, 57, 127-138.	3.6	8
13	Numerical Modeling of CO ₂ Splitting in High-Temperature Solar-Driven Oxygen Permeation Membrane Reactors. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , 2021, 143, .	1.8	1
14	Contact-Based Method to Evaluate Mixing in Multicomponent Experiments and Simulations. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 16126-16142.	3.7	4
15	Investigation of hydrogen oxidation in supercritical H ₂ O/CO ₂ mixtures using ReaxFF molecular dynamics simulation. <i>Journal of Supercritical Fluids</i> , 2020, 155, 104661.	3.2	22
16	Onset of slugging fluidization in supercritical water fluidized bed. <i>Particuology</i> , 2020, 52, 47-56.	3.6	8
17	Experimental investigation of pressure fluctuation propagation in two orthogonal directions using a clapboard-type internally circulating fluidized bed. <i>Advanced Powder Technology</i> , 2020, 31, 3395-3407.	4.1	10
18	Development of a Detailed Kinetic Model for Hydrogen Oxidation in Supercritical H ₂ O/CO ₂ Mixtures. <i>Energy & Fuels</i> , 2020, 34, 15379-15388.	5.1	18

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19	Instantaneous mixing characteristics of binary mixtures differing in density in a gas–solid fluidised bed. <i>Particuology</i> , 2020, 53, 63-71.	3.6	2
20	Numerical investigation of binary particle mixing in gas-solid fluidized bed with a bubble-based drag EMMS model. <i>Advanced Powder Technology</i> , 2020, 31, 1529-1542.	4.1	11
21	Modeling of Wall-to-Bed Heat Transfer in a Supercritical Water Fluidized Bed by the Packet Approach. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 22640-22655.	3.7	8
22	Solar fuels production: Two-step thermochemical cycles with cerium-based oxides. <i>Progress in Energy and Combustion Science</i> , 2019, 75, 100785.	31.2	122
23	Experimental Study on the Two-Phase Flow Structure in a Supercritical Water-Fluidized Bed. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 20099-20108.	3.7	12
24	Minimum bubbling fluidization velocity in a supercritical water fluidized bed acquired by the dual-capacitance probe method. <i>Chemical Engineering Science</i> , 2019, 199, 359-370.	3.8	15
25	Bubble behavior in gas–solid bubbling fluidized beds based on EMMS model: Comparison of 2D, Q2D, and 3D simulations. <i>Chemical Engineering Research and Design</i> , 2019, 149, 65-80.	5.6	9
26	Toward High-Value Hydrocarbon Generation by Photocatalytic Reduction of CO ₂ in Water Vapor. <i>ACS Catalysis</i> , 2019, 9, 5590-5602.	11.2	151
27	Kinetic study on hydrogen oxidation in supercritical H ₂ O/CO ₂ mixtures. <i>Fuel Processing Technology</i> , 2019, 193, 123-130.	7.2	15
28	Evaluation of stability and catalytic activity of Ni catalysts for hydrogen production by biomass gasification in supercritical water. <i>Carbon Resources Conversion</i> , 2019, 2, 95-101.	5.9	45
29	Materials design of perovskite solid solutions for thermochemical applications. <i>Energy and Environmental Science</i> , 2019, 12, 1369-1384.	30.8	122
30	Numerical simulation of bubble behavior in a quasi-2D fluidized bed using a bubble-based EMMS model. <i>Particuology</i> , 2019, 46, 40-54.	3.6	17
31	Fluidization of Particles in Supercritical Water: A Comprehensive Study on Bubble Hydrodynamics. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 2036-2051.	3.7	19
32	Cyclone separation in a supercritical water circulating fluidized bed reactor for coal/biomass gasification: Structural design and numerical analysis. <i>Particuology</i> , 2018, 39, 55-67.	3.6	20
33	Reactivity and Efficiency of Ceria-Based Oxides for Solar CO ₂ Splitting via Isothermal and Near-Isothermal Cycles. <i>Energy & Fuels</i> , 2018, 32, 736-746.	5.1	20
34	Reactivity of Ni, Cr and Zr doped ceria in CO ₂ splitting for CO production via two-step thermochemical cycle. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 13754-13763.	7.1	29
35	Hydrogen production by biomass gasification in a supercritical water fluidized bed reactor: A CFD-DEM study. <i>Journal of Supercritical Fluids</i> , 2018, 131, 26-36.	3.2	55
36	An investigation of the relationship between statistical analysis and multiscale analysis in a circulating fluidised bed. <i>Chemical Engineering Research and Design</i> , 2018, 140, 175-193.	5.6	2

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37	Oxidative degradation of quinazoline in supercritical water: a combined ReaxFF and DFT study. <i>Molecular Simulation</i> , 2018, 44, 1508-1519.	2.0	9
38	Experimental study of wall-to-bed heat transfer in a supercritical water fluidized bed. <i>International Journal of Multiphase Flow</i> , 2018, 109, 26-34.	3.4	10
39	Fluidization in Supercritical Water: Heat Transfer between Particle and Supercritical Water. <i>International Journal of Chemical Reactor Engineering</i> , 2018, 16, .	1.1	4
40	Effect of cohesive powders on pressure fluctuation characteristics of a binary gas-solid fluidized bed. <i>Korean Journal of Chemical Engineering</i> , 2018, 35, 2117-2126.	2.7	12
41	Supercritical water gasification of glucose in fluidized bed reactor: A numerical study. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 7857-7865.	7.1	28
42	A new quantitative measurement method for mixing and segregation of binary-mixture fluidized bed by capacitance probe. <i>Chemical Engineering Journal</i> , 2017, 326, 99-108.	12.7	38
43	Unsteady-state bubble dynamic wave velocity of gas-solid bubbling fluidized bed. <i>Chemical Engineering Research and Design</i> , 2017, 126, 255-264.	5.6	2
44	Fluidization of solids with water in supercritical conditions Characteristics of pressure fluctuations. <i>Chemical Engineering Research and Design</i> , 2016, 109, 657-666.	5.6	18
45	Bubble dynamic wave velocity in fluidized bed. <i>Chemical Engineering Science</i> , 2016, 147, 21-29.	3.8	10
46	Fluidization behavior in high-pressure water at temperature from ambient to supercritical. <i>Powder Technology</i> , 2016, 304, 89-100.	4.2	26
47	Solar fuel production at high temperatures using ceria as a dense membrane. <i>Energy</i> , 2016, 104, 53-63.	8.8	32
48	Numerical analysis of heat transfer and solid volume fraction profiles around a horizontal tube immersed in a supercritical water fluidized bed. <i>Applied Thermal Engineering</i> , 2016, 93, 200-213.	6.0	29
49	Industrialization prospects for hydrogen production by coal gasification in supercritical water and novel thermodynamic cycle power generation system with no pollution emission. <i>Science China Technological Sciences</i> , 2015, 58, 1989-2002.	4.0	88
50	A CFD-DEM study of bubble dynamics in fluidized bed using flood fill method. <i>Chemical Engineering Journal</i> , 2015, 274, 123-131.	12.7	53
51	Flow structure and bubble dynamics in supercritical water fluidized bed and gas fluidized bed: A comparative study. <i>International Journal of Multiphase Flow</i> , 2015, 73, 130-141.	3.4	46
52	A numerical study of bed expansion in supercritical water fluidized bed with a non-spherical particle drag model. <i>Chemical Engineering Research and Design</i> , 2015, 104, 164-173.	5.6	39
53	Supercritical water gasification research and development in China. <i>Journal of Supercritical Fluids</i> , 2015, 96, 144-150.	3.2	179
54	Bed to wall heat transfer in supercritical water fluidized bed: Comparison with the gas-solid fluidized bed. <i>Applied Thermal Engineering</i> , 2015, 88, 297-305.	6.0	34

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55	Hydrogen Production by Supercritical Water Gasification of Biomass with Homogeneous and Heterogeneous Catalyst. <i>Advances in Condensed Matter Physics</i> , 2014, 2014, 1-9.	1.1	37
56	Numerical study on laminar free convection heat transfer between sphere particle and high pressure water in pseudo-critical zone. <i>Thermal Science</i> , 2014, 18, 1293-1303.	1.1	17
57	Fluid hydrodynamic characteristics in supercritical water fluidized bed: A DEM simulation study. <i>Chemical Engineering Science</i> , 2014, 117, 283-292.	3.8	49
58	Flow separation from a spherical particle in supercritical water. <i>Chemical Engineering Research and Design</i> , 2014, 92, 2273-2282.	5.6	22
59	Behavior of nickel catalysts in supercritical water gasification of glucose: Influence of support. <i>Biomass and Bioenergy</i> , 2014, 67, 125-136.	5.7	45
60	Catalysis in Supercritical Water Gasification of Biomass: Status and Prospects. <i>Biofuels and Biorefineries</i> , 2014, , 343-371.	0.5	4
61	Solar receiver/reactor for hydrogen production with biomass gasification in supercritical water. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 13038-13044.	7.1	54
62	Minimum fluidization velocities for supercritical water fluidized bed within the range of 633â€“693K and 23â€“27MPa. <i>International Journal of Multiphase Flow</i> , 2013, 49, 78-82.	3.4	67
63	Co-precipitated Niâ€“Mgâ€“Al catalysts for hydrogen production by supercritical water gasification of glucose. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 9688-9700.	7.1	46
64	The influence of alkali precipitation on supercritical water gasification of glucose and the alkali recovery in fluidized-bed reactor. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 13293-13299.	7.1	37
65	Hydrogen production by supercritical water gasification of biomass: Particle and residence time distribution in fluidized bed reactor. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 13117-13124.	7.1	57
66	Hydrogen production by supercritical water gasification of glucose with Ni/CeO ₂ /Al ₂ O ₃ : Effect of Ce loading. <i>Fuel</i> , 2013, 103, 193-199.	6.4	55
67	Numerical Study on the Mixed Convection Heat Transfer between a Sphere Particle and High Pressure Water in Pseudocritical Zone. <i>Advances in Mechanical Engineering</i> , 2013, 5, 527182.	1.6	15
68	Hydrogen production by supercritical water gasification of biomass: Explore the way to maximum hydrogen yield and high carbon gasification efficiency. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 3177-3185.	7.1	110
69	Hydrogen production from glycerol by supercritical water gasification in a continuous flow tubular reactor. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 5559-5568.	7.1	145
70	Hydrogen production from supercritical water gasification of alkaline wheat straw pulping black liquor in continuous flow system. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 13528-13535.	7.1	102
71	Technical and economic evaluation of solar hydrogen production by supercritical water gasification of biomass in China. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 14349-14359.	7.1	77
72	Hydrogen production by biomass gasification in supercritical water with bimetallic Niâ€“M/Al ₂ O ₃ catalysts (M=Cu, Co and Sn). <i>International Journal of Hydrogen Energy</i> , 2011, 36, 14391-14400.	7.1	80

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73	Hydrogen production by partial oxidative gasification of biomass and its model compounds in supercritical water. International Journal of Hydrogen Energy, 2010, 35, 3001-3010.	7.1	101
74	Hydrogen production by biomass gasification in supercritical water over Ni/ γ -Al ₂ O ₃ and Ni/CeO ₂ - γ -Al ₂ O ₃ catalysts. International Journal of Hydrogen Energy, 2010, 35, 7161-7168.	7.1	104
75	Hydrogen production by coal gasification in supercritical water with a fluidized bed reactor. International Journal of Hydrogen Energy, 2010, 35, 7151-7160.	7.1	187
76	Hydrogen production by biomass gasification in supercritical water using concentrated solar energy: System development and proof of concept. International Journal of Hydrogen Energy, 2010, 35, 7134-7141.	7.1	83
77	Thermodynamic modeling and analysis of biomass gasification for hydrogen production in supercritical water. Chemical Engineering Journal, 2007, 131, 233-244.	12.7	217
78	Thermodynamic analysis of hydrogen production from biomass gasification in supercritical water. Energy Conversion and Management, 2006, 47, 1515-1528.	9.2	194
79	A Review on Supercritical Fluidization. , 0, , .		0
80	Mesoscale-Structure-Dependent EMMS Drag Model for an SCW Fluidized Bed: Formulation of Conservation Equations Based on Structures in Subphases. Industrial & Engineering Chemistry Research, 0, , .	3.7	3